

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

see form PCT/ISA/220

Date of mailing
(day/month/year) see form PCT/ISA/220 (page 2)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION

See paragraph 2 below

International application No.
PCT/DE2004/001605

International filing date (day/month/year)
7/22/2004

Priority date (day/month/year)
9/15/2003

International Patent Classification (IPC) or both national classification and IPC
G08C10/02, G05B19/418

Applicant
Robert Bosch GMBH

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/DE2004/001605

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/DE2004/001605

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2,3	YES
	Claims	1,4	NO
Inventive step (IS)	Claims		YES
	Claims	1-4	NO
Industrial applicability (IA)	Claims	1-4	YES
	Claims		NO

2. Citations and explanations:

see supplementary page

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY
(SUPPLEMENTARY PAGE)

International File No. PCT/DE2004/001605

Re Item V

Reasoned statement with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: DE 33 30 904 A1 (SIEMENS AG) March 7, 1985 (1985-03-07)

D2: DE 198 22 146 A1 (VOLKSWAGEN AG, 38440 WOLFSBURG, DE) December 3, 1998 (1998-12-03)

D3: DE 101 14 504 A1 (ROBERT BOSCH GMBH) October 2, 2002 (2002-10-02)

2. The present application does not meet the requirements of Article 33(1) PCT because the of object of Claim 1 is not novel as defined by Article 33(2) PCT.

2.1 Document D1 describes (the references in brackets refer to this document):

A first sensor (page 4, lines 4 - 7; Figure 1, see 4) having a transmitter module for transferring data via a line, the first sensor S1, S2, to Sn receiving power via the line (page 11, lines 17 - 24; page 13, lines 25 - 30; Figure 2, see 18), wherein the first sensor S1, at a point in time of receiving a first power level (the current in this case) transmits the data for a first time interval T_{s1} and a second sensor S2 which is connected to

the line in parallel to the first sensor S1 (page 4, lines 4 - 7; Figure 1) transmits its data after the first time interval Ts1 for a second time interval Ts2, the first and the second sensor S1 and S2 each having a timing control which is triggered by the point in time and controlling the subsequent transmission of the first and second sensor S1 and S2 (page 12, lines 27 - 35; page 14, line 28 - page 15, line 10; Figure 3).

2.2 Therefore, the object of Claim 1 is not novel (Article 33(2)PCT).

2.3 Even if, for the purposes of argumentation, there was novelty with respect to the power level feature which is indicated as voltage level in the application, the object of Claim 1 would not be an inventive step (Article 33(3) PCT). It is generally known to the person skilled in the art in the field of sensor technology and telemetry that the signals can be generated by varying the current or voltage level. (see Document D2, for example: column 3, lines 26 - 27; Figure 2). Such measures would therefore be obvious to the person skilled in the art.

2.4 Even if D3 (column 3, lines 26 - 31) is assumed to be the most proximate related art, the combination of D3 and D2 produces the claimed object in an obvious manner.

3. Dependent Claim 4 contains no features, which in combination with the features of any claim to which it refers, meet the requirements of the PCT with respect to novelty; see Document D1 and the corresponding text passages specified in the search report.

-Claim 4: (page 4, lines 4 - 17; Figure 1, see 1)

Therefore, the object of Claim 4 is not novel (Article 33(2)PCT).

4. Dependent Claims 2 - 3 contain no features, which in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to inventive step; see Document D2 and the corresponding text passages specified in the search report.

-Claims 2 and 3: (column 3, lines 26 - 37; Figure 2)

For that reason, the object of Claims 2 - 3 is not based on an inventive step (Article 33(3) PCT).